BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Subsidiary Diploma in Engineering Pearson BTEC International Level 3 Foundation Diploma in Engineering Pearson BTEC International Level 3 Diploma in Engineering Pearson BTEC International Level 3 Diploma in Electrical/Electronic Engineering Pearson BTEC International Level 3 Diploma in Mechanical Engineering Pearson BTEC International Level 3 Diploma in Digital Engineering Pearson BTEC International Level 3 Diploma in Manufacturing Engineering Pearson BTEC International Level 3 Diploma in Aeronautical Engineering Pearson BTEC International Level 3 Extended Diploma in Engineering Pearson BTEC International Level 3 Extended Diploma in Electrical/Electronic Engineering Pearson BTEC International Level 3 Extended Diploma in Mechanical Engineering Pearson BTEC International Level 3 Extended Diploma in Digital Engineering Pearson BTEC International Level 3 Extended Diploma in Manufacturing Engineering Pearson BTEC International Level 3 Extended Diploma in Aeronautical Engineering
Unit number and title	**Unit 35: Computer Programming**
Learning aim(s)	**A:** Examine the project structures and methods used in the development of software products
Assignment title	Planning the development of a software solution in Engineering
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You are employed as a trainee Software Developer in a small engineering organisation specialising in bespoke machined components and have been asked to investigate ways to improve the software development process at the company. You have been provided with access to two software products. One product is an internal Financial Management software project, which is continually updated to reflect current business. The second is a web portal that customers use to design and order their bespoke components.

Task 1	As part of your investigation you have been asked to examine the different project job roles and methodologies involved in typical software development projects. It has been suggested that you look at the Waterfall model, Rapid Application Development and Agile methodologies. The tasks are to: • Examine two different software development projects, describing the project job roles, the purpose and importance of user requirements and process stages. • Evaluate each methodology by comparing the key process stages, and the advantages and the disadvantages of each approach.
Checklist of evidence required	A written report on the different roles and methodologies in software development projects.

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
35/A.D1	Evaluate, using language that is technically correct and of a high standard, the methodologies and job roles used in two different software development projects, explaining the purpose and importance of user requirements.
35/A.M1	Compare the methodologies and job roles used in two different software development projects, explaining the purpose and importance of user requirements.
35/A.P1	Explain the methodologies and typical job roles used in two different software development projects and the purpose and importance of user requirements.

Sources of information to support you with this Assignment	Khan Academy (https://www.khanacademy.org/) Stack Overflow (http://http://stackoverflow.com/) - answers to common programming questions Codecademy (https://www.codecademy.com/) MSDN (https://msdn.microsoft.com/en-GB/) Agile (http://www.agilealliance.org/)